

| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|-------------------------------|------------------------|---------------------|--|
|                               | 10/791,442             | CHOI ET AL.         |  |
|                               | Examiner               | Art Unit            |  |
|                               | Sherrie Hsia           | 2614                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to the preliminary amendment filed on 3-14-05.
2.  The allowed claim(s) is/are claims 25-36, 39-44, 37, 38 and 45-58 (renumbered as claims 1-34 respectively).
3.  The drawings filed on 01 March 2004 are accepted by the Examiner.

4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All    b)  Some\*    c)  None    of the:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. 09/933,206.
3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 2/18/05, 2/8/05
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

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1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

On page 2, line 6, after "number", --09/933,353-- has been inserted;

Line 7, after "number", --09/933,280-- has been inserted.

On page 12, line 23 and page 17, line 20, "16" has been changed to --25--.

On page 18, line 23, "16" has been changed to --52--.

On page 20, line 10, "4" has been changed to --16--.

On page 21, line 20, "sysbol" and "synbol" have been changed to --symbol--.

2. The following is an examiner's statement of reasons for allowance: The prior art fails to show or fairly suggest an enhanced VSB receiver and method for receiving and decoding an input signal including main data and enhanced data transmitted from a VSB transmitter, having the combinations as claimed, including a symbol indicator for indicating whether each symbol included in the input signal corresponds to the main data or enhanced data, a main VSB processor for processing the input signal received from the VSB transmitter in a reverse order of the VSB transmitter and outputting a multiplexed data signal, a demultiplexer for demultiplexing the multiplexed data signal received from the main VSB processor into the main data and the enhanced data, and a supplemental VSB processor for decoding the enhanced data demultiplexed from the demultiplexer to obtain original data, as recited in claims 25 and 45. Also, the prior art

fails to show or fairly suggest an enhanced VSB receiver and method for receiving and decoding an input signal including main data and enhanced data transmitted from a VSB transmitter, having the combinations as claimed, including a data attribute generator configured to generate data attribute information which indicates whether each symbol included in the input signal corresponds to the main data or the enhanced supplemental data, a main VSB processor configured to process the input signal received from the VSB transmitter in a reverse order of the VSB transmitter using the data attribute information, a demultiplexer configured to demultiplex the signal processed by the main VSB processor into the main data and the enhanced supplemental data, and a supplemental VSB processor configured to decode the enhanced supplemental data demultiplexed from the demultiplexer in order to obtain original supplemental data, as recited in claims 55 and 57. In addition, the prior art fails to show or fairly suggest an enhanced VSB receiver and method for receiving and decoding an input signal including main data and enhanced data transmitted from a VSB transmitter, having the combinations as claimed, including a data attribute generator configured to generate data attribute information which indicates whether each symbol included in the input signal corresponds to the main data or the enhanced supplemental data, a main VSB processor configured to process the input signal received from the VSB transmitter in a reverse order of the VSB transmitter using the data attribute information, and to output a multiplexed data signal, a main data remover configured to remove the main data from the multiplexed data signal in order to output the enhanced supplemental data only, and a supplemental VSB processor configured to decode the enhanced supplemental data from the main data remover in order to obtain original supplemental data, as recited in claims 56 and 58.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherrie Hsia whose telephone number is (571) 272-7347.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Any response to this action should be mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Or faxed to:**

**(703) 872-9306**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service Office whose telephone number is (703) 308-HELP.



Sherrie Hsia  
Primary Examiner  
Art Unit 2614

SH

April 29, 2005